

Elazar Rabbani et al.

Serial No. 08/978,632

Filed: November 25, 1997

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AMENDMENT TO THE CLAIMS

Please amend the application as follows:

1-245 (Cancelled)

246 (Currently Amended) A chemically modified nucleic acid construct, said construct comprising at least one modified nucleotide or at least one nucleotide analog wherein at least one modified nucleotide or nucleotide analog comprises a fusogenic ~~protein~~peptide, ~~and~~ at least one modified nucleotide or nucleotide analog comprises a ligand to a cell receptor, and at least one modified nucleotide or nucleotide analog comprises a non-nucleic acid entity that confers nuclear localization, which construct when present in a cell is used as a template for the synthesis of a nucleic acid product having biological activity wherein said product comprises RNA.

247 (Previously Presented) The construct of claim 246, wherein at least a portion of said construct is linear, circular or branched.

248 (Previously Presented) The construct of claim 246, wherein at least a portion of said construct is single-stranded, double-stranded or triple-stranded.

249 (Previously Presented) The construct of claim 246, wherein said construct is in double-stranded form.

250 (Previously Presented) The construct of claim 246, having at least one terminus, said terminus comprising a polynucleotide tail.

251 (Previously Presented) The construct of claim 250, wherein said polynucleotide tail is hybridized to a complementary polynucleotide sequence.

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252 (Previously Presented) The construct of claim 246, wherein said construct comprises DNA or RNA.

253-254 (Cancelled)

255 (Currently Amended) The construct of claim 246, wherein at least one of said modified nucleotide[[s]] or nucleotide analog has been modified at least on the ~~backbone or at least on the side chains~~sugar moiety.

256-263 (Cancelled)

264 (Currently Amended) The construct of claim 246, wherein said ligand ~~or ligands are~~ is attached at least to a single stranded segment, at least to a double stranded segment, at least to a single stranded construct tail, or at least to a sequence complementary to a construct tail.

265 (Previously Presented) The construct of claim 246, wherein said ligand or ligands are macromolecules or small molecules.

266-270 (Cancelled)

271 (Currently Amended) A chemically modified double-stranded nucleic acid construct, wherein solely one strand of said construct comprises a modified nucleotide or a nucleotide analog, wherein said modified nucleotide or nucleotide analog comprises at least one non-nucleic acid entity, wherein said non-nucleic acid entity is selected from the group consisting of a polypeptide, a saccharide, a fatty acid, and a fatty acid ester, which construct when present in a cell is used as a template for the synthesis of a nucleic acid product having biological activity,

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said product comprising RNA, wherein said non-nucleic acid entity is a ligand to a cell
receptor~~confers cell targeting~~.

272 (Canceled)

273 (Currently Amended) A chemically modified nucleic acid construct, said construct comprising a modified nucleotide or a nucleotide analog, wherein said modified nucleotide or nucleotide analog comprises at least one non-nucleic acid entity, which construct when present in a cell is used as a template for the synthesis of a nucleic acid product having biological activity, said product comprises RNA, wherein said non-nucleic acid entity ~~confers at least nuclease resistance or at least~~ cell targeting, wherein said construct further comprises at least ~~two~~ three strands, wherein ~~at the~~ first strand is a ~~cellular~~ template strand and the second strand (a) has at least one terminus, said terminus comprising a polynucleotide tail and (b) comprises two segments, wherein one segment is complementary to at least a portion of the first strand and the second segment lacks said complementarity and comprises said polynucleotide tail, wherein said polynucleotide tail is hybridized to a complementary polynucleotide sequence in said third nucleic acid strand, wherein said ~~complementary third nucleic acid strand~~ sequence comprises a non-nucleic acid entity.

274 (Previously Presented) The construct of claim 246, wherein said construct further comprises a modified nucleotide or nucleotide analog comprising a non-nucleic acid entity comprising a nuclear localization signal ~~or cellular localization signal~~.

275 (Canceled)

276 (New) The construct of claim 246, wherein at least one of said modified nucleotide or nucleotide analog has been modified at least on the base moiety.

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277 (New) The construct of claim 246, wherein at least one of said modified nucleotide or nucleotide analog has been modified at least on the phosphate moiety.

278 (New) The construct of claim 271, further comprising a modified nucleotide or nucleotide analog that comprises a non-nucleic acid entity that confers nuclear localization.

279 (New) The construct of claim 273, further comprising a modified nucleotide or nucleotide analog that comprises a non-nucleic acid entity that confers nuclear localization.